# STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF FORESTRY & FIRE PROTECTION



Northern Region - Fairbanks-Delta Area

# PRELIMINARY BEST INTEREST FINDING AND DECISION FOR

Two Rivers Junction #3 NC-1806-F

November 2023

# **Abbreviations**

ADEC Alaska Department of Environmental Conservation

ADF&G Alaska Department of Fish and Game

ADNR Alaska Department of Natural Resources

BIF Best interest finding

DMLW Division of Mining, Land and Water

DOF Division of Forestry & Fire Protection

FLUP Forest Land Use Plan

FNSB Fairbanks-Northstar Borough

FRPA Alaska Forest Resources and Practices Act

FYSTS Five-Year Schedule of Timber Sales

MBF Thousand board feet

OHA Office of History and Archeology

ROW Right-of-way

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#### I. PROPOSED ACTION

DOF is proposing to offer for sale approximately 25 acres of birch fuelwood from state lands in the Two Rivers Road area. The volume to be offered totals approximately 442 CCF. DOF would sell the timber as a competitive bid sale for commercial use, as well as possible small negotiated sales (AS 38.05.115) and for personal use firewood. For this timber sale, the PBIF and Draft FLUP are being issued for review at the same time. The land covered by this PBIF appeared in the 2022 Northern Region Five Year Schedule of Timber Sales (FYSTS).

The management objectives for the proposed timber sales are:

- Provide the raw material for the forestry industry to produce timber products providing benefits to the state and local economy through employment opportunities.
- Harvest the commercial sawtimber and fuelwood before a significant decrease in vigor occurs and return the site to a young productive mixed forest.
- Provide firewood for the residential heating needs of interior Alaska communities.
- Promote multiple use management that provides for the production, utilization, and replenishment of timber resources while perpetuating personal, commercial, and other beneficial non-timber uses of the forest resources.

# II. STATUTORY AND REGULATORY AUTHORITY

The Division is taking this action under the authority of

- AS 38.05.035(e) Best Interest Finding;
- AS 38.05.110-120 and 11 AAC 71, Timber Sale Statutes and Regulations; and
- AS 41.17.010-950 and 11 AAC 95 Forest Resources and Practices Statutes and Regulations.

# III. ADMINISTRATIVE RECORD

The Division will maintain an administrative record regarding the decision of whether or not to proceed with the action as proposed. This record will be maintained at the DOF's Fairbanks-Delta Area Office filed as NC-1806-F.

# IV. SCOPE OF DECISION

This preliminary best interest finding (PBIF) is the first part of step three of a six-step process to design, sell, and administer timber sales. The following list summarizes the overall process:

Step 1: Regional planning. The Department of Natural Resources (DNR) develops area plans and state forest management plans to designate appropriate uses for state land, classify the land accordingly, and establish management guidelines for multiple use. These plans determine where timber sales are an allowed use, and what other uses must be considered when designing and implementing sales. Subsequent land use decisions must be consistent with the area plans. The area in this PBIF is covered by the Tanana Valley State Forest Management Plan. The finding also considers the Interagency Wildland Fire Management Plan. There is one Community Wildfire Protection Plan (CWPP) in this area, the Fairbanks North Star Borough CWPP. The

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proposed area is within the Fairbanks North Star Borough (FNSB) and considers the FNSB Regional Comprehensive Plan.

Step 2: Five-Year Schedule of Timber Sales (AS 38.05.113). The Fairbanks-Delta Area prepares a Five-year Schedule of Timber Sales (FYSTS) every other year. The Schedule identifies proposed sales, including their location, volume, and main access routes. The Five-Year Schedules are scoping documents that provide an opportunity for public, agency, and industry to identify potential issues and areas of interest for further consideration in the best interest finding and Forest Land Use Plan. A proposed timber sale must appear in at least one of the two Five-year Schedules preceding the sale.

Step 3: Best Interest Finding. A best interest finding is the decision document that:

- Ensures that the best interest of the State will be served by this proposed action,
- Establishes the overall area within which the timber sale may occur,
- Determines the amount of timber that will be offered for sale and the duration of the sale,
- Sets the overall harvest and reforestation strategy for the sale area,
- Determines whether the sale proposal complies with the Constitutional requirement to manage for sustained yield by evaluating the amount of timber in the sale and the annual allowable cut for the affected area,
- Selects the appropriate method of sale (i.e., competitive or negotiated sale), and
- Determines the appraisal method that will be used to determine the sale price.

The Preliminary Best Interest Finding (PBIF) is intended to provide sufficient information for reviewers to ensure that the best interest of the State will be served by the proposed action.

After public and agency review of the PBIF, DOF reviews comments, makes changes as appropriate, and issues a final best interest finding (BIF). DOF must adopt a final BIF before selling timber. An eligible person affected by this decision, and who provided timely written comment or public hearing testimony to the department, may appeal the decision to the DNR Commissioner per AS 44.37.011 and 11 AAC 02.

Step 4: Forest Land Use Plans (AS 38.05.112). Prior to authorizing harvest of timber on any area greater than 10 acres, the DOF must adopt a site-specific Forest Land Use Plan (FLUP) for the harvest area. DOF will prepare a FLUP for the harvest area within the overall sale area covered by this best interest finding. FLUPs specify the site, size, timing, and harvest methods for harvest unit within the sale area. FLUPs also address site-specific requirements for access construction and maintenance, reforestation, and multiple use management. Draft FLUPs will be based on additional field work, agency and community consultation, and site-specific analyses by the DOF, and will be subject to public and agency review.

<u>Step 5: Timber sales and contracts</u>. Following adoption of the final best interest finding, and completion of the FLUP, DOF will offer the timber for sale by auctioning competitive sales and/or negotiating some sales with purchasers. The Division will sign a contract with the winning bidder for each sale. The contract will include stipulations to ensure compliance with the best interest finding, FLUP, and statutory requirements.

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Step 6: Sale administration. DOF administers timber sales and conducts field inspections to ensure compliance with the final best interest finding, FLUP, timber sale contract, and applicable laws, including the Alaska Forest Resources and Practices Act and regulations (AS 41.17 and 11 AAC 95), and forest management statutes and regulations in AS 38.05 and 11 AAC 71.

# V. PROJECT LOCATION, LAND STATUS, AND DESCRIPTION

#### A. Location

The proposed sale is located approximately 24 miles east of the Fairbanks Forestry office in the Two Rivers Area north of Chena Hot Springs Road Mile 18.3. The unit lies east of the Two Rivers Forest Road near mile 3.0. The unit is within the Fairbanks North Star Borough. The proposed sale is located within Section 18, Township 1 North, Range 4 East, and Section 13, Township 1 North, Range 3 East, Fairbanks Meridian. The sale area is shown on the attached map and is within the United States Geological Survey 1:63,360 Quadrangle map titled Fairbanks D-1. The proposed sale area is just north of Fairbanks Northstar Borough (FNSB) property, and may be accessed either by agreement with FNSB or within the State Forest. State Forest access involves constructing a 1.0 mile winter road from a spur road within the State Forest that intersects Two Rivers Forest Road at mile 4.6.

#### **B.** Title status

The proposed sale area is owned and managed by the State of Alaska Department of Natural Resources. The acquisition for the land upon which the sale is proposed is based on General Selection 12. The title was transferred by Patent 50-65-0294. There are no known title restrictions on the area.

# C. Land use planning, classification, and management intent

The proposed sale area is legislatively designated as part of Unit 6 of the Tanana Valley State Forest (AS 41.17.400), and is managed according to the Tanana Valley State Forest Management Plan, 2001 Update. All of this unit will remain open to mineral location and leasing. There are no specific restrictions on timber sales within the TVSF Management Plan.

The Interagency Fire Management Plan includes these lands in the 'Full' protection category.

This area is within the Fairbanks Northstar Borough's Regional Comprehensive Plan (2005), and nearby adjacent FNSB-owned parcels are zoned for General Use (GU-1), some parcels of which are managed by the Borough's Parks & Recreation Department. The sale boundary shall be buffered a minimum of 50 feet from the property boundary. FNSB's Plan supports forest development activities while minimizing land use conflicts.

# D. Current access and land use:

The sale is in the Two Rivers Forest Road system, but does not currently have direct access. The Two Rivers Forest Road is an easement through FNSB property and comes with 1/4

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mile of the sale boundary. This mainline forest road extends 12 miles into the State Forest with multiple spurs.

Planned access is winter-only from within the State Forest. From the main Two Rivers Forest Road at 4.6 mile, a spur road heads east toward closed timber sales. At 0.2 miles on this spur road, a new winter road approximately 1.1 miles long must be constructed heading downhill and crossing a valley bottom that drains to Jenny M Creek.

Alternate all-season access may be arranged from Two Rivers Road Mile 3.0 by contacting FNSB and requesting a Temporary Access License (TAL) to build 0.25 miles of temporary road across Borough property.

Existing nearby land uses consist mostly of recreational access by ATV, snowmachine, and dog-mushing, hunting and trapping, and personal use and commercial timber harvest. A residential neighborhood is located approximately 1.4 miles south of the timber sale and an elementary school 2.1 miles south, both of which share access along the Two Rivers Road.

# E. Background and description of proposal

- 1. <u>Background</u>: According to the Tanana Valley State Forest Management Plan, the forested areas accessed via Two Rivers Forest Road system falls within Unit 6 and are to be "managed for commercial and personal use timber production in accordance with other policies stated in this plan". DOF is offering these timber sales while also recognizing other users of the State Forest. The intent is to manage for multiple users while still maintaining a productive "working forest". These sales fall in line with the guidance provided in the TVSF Management Plan.
- 2. <u>Timber volume and sustained yield</u>: The proposed project area has an estimated volume of 442 CCF of birch fuel wood timber on approximately 25 acres. Final harvest unit boundaries and timber volume estimates will be determined once DOF staff has completed all pre-sale field measurements. The Fairbanks Area Annual Allowable Cut (AAC) is calculated at approximately 4,606 acres of harvest annually. The volumes proposed in this harvest and in combination with timber volumes from other proposed timber sales that are offered will be within the allowable cut and comply with sustained yield requirements.
- 3. Harvest unit design: The timber will be harvested as a heavy partial cut for birch and follow the topography of the hillside, with upslope fingers of unharvested trees retained to aid in reforestation. All birch 6" DBH or larger will be included for harvest. Any white spruce and aspen, as well as any birch smaller than 6", will not be cut. The logging operations will follow all applicable Best Management Practices and residual trees will be protected from damage during harvest operations. Harvesting will be by the whole tree yarding system using a ground-based skidding method. Slash disposal at the landings will be by burning or by salvage for fuelwood use.

- a. Reforestation and site preparation: The sale area will be reforested in compliance with the Forest Resources and Practices regulations (11 AAC 95.375-.390)

  Natural regeneration will be utilized initially for reforestation. The sale has been laid out so that areas adjacent to the boundary include mature, robust birch trees to provide seed to this unit, and the retention of upslope 'fingers' is expected to provide a seed source to the center of the stand. Reforestation will be assessed within five years post-harvest, and a regeneration survey will be conducted if regeneration appears marginal or patchy. If the survey indicates inadequately stocked areas, then scarification may be performed on non-stocked areas. The goal for regeneration is to achieve a minimum of 450 evenly distributed trees per acre at the end of the regeneration survey period (any commercial tree species).
- b. <u>Access design and construction</u>: Access design, construction, and maintenance will comply with the Forest Resources and Practices regulations (11 AAC 95.285-.355).
  - Primary access will involve new construction of a 1.1-mile winter road from the existing Two Rivers Forest Road system and reach the sale from the west. The winter road would cross the upper reaches of a tributary drainage to Jenny M Creek. The winter-only portion of the road involves crossing a valley bottom approximately 1,200 wide. The drainage to be crossed has a perennial flow, but drains a relatively small area (< 500 acre) and has a visible channel that continues approximately 3/4 mile upstream from the proposed crossing.
  - DOF will require the Operator to contact ADF&G to determine if a Fish Habitat Permit is needed for a winter stream crossing (AS 16.05.871 (b)). Regardless of ADF&G's determination, any incipient drainages will be crossed perpendicular to the direction of surface flow, the total length of the route shall be minimized so as to limit impacted area, and the winter-only access will reduce the possibility of sedimentation or vertical thermal erosion by retaining the existing vegetation mat.
  - Between individual sale harvests any secondary winter roads or spurs will be inactive and maintained in accordance with 11 AAC 95.315 (f), specifically that portion of the new winter road that crosses the valley bottom. The first 3/4 mile of the new road may be upgraded to all-season standards and maintained in active status for personal use firewood harvest or other timber harvest.
  - Generally DOF applies for public easement right of ways for its long-term routes; this proposed winter access would not qualify as one of these long term routes.
- c. <u>Appraisal method</u>: Commercial sales will be based on transactional evidence and market demand and DOF will apply a value for those products. DOF will appraise the timber value in compliance with 11 AAC 71.092.

# F. Resources and management

1. Timber.

- a. <u>Timber stand composition and structure</u>: The stand to be harvested is primarily a mature closed canopy birch forest, with small components of aspen, white spruce, and black spruce. This stand contains predominantly birch between 8-12" DBH and the largest measured trees were 14" DBH. Ages of birch trees in this stand are approximately 60-70 years at DBH. Moss is generally not found in this stand due to leaf litter accumulation. The grass component is moderate in this stand and is estimated to cover < 10% of the area. There is an estimated 15% defect in the stand.
- b. Stand silvics: The normally merchantable species of trees on the TVSF are white spruce and birch. Regeneration of birch occurs principally from seedfall spread by wind, and secondarily from root-collar sprouting. Data and research on regeneration and growth characteristics of these species are compiled within the Resource Analysis of the Tanana Valley State Forest (TVSF) Management Plan. The harvest and reforestation systems available in Interior Alaska are also reviewed and listed in the Resource Analysis. The results of the public and agency discussions for harvest and reforestation are discussed in the TVSF Management Plan. Silvicultural harvest systems that facilitate even-aged (natural) management are generally preferred. They mimic the ecological impact of wildfire and other disturbances and result in the greatest increase in site productivity. Even-aged management is normally accomplished through clear cuts, patch cuts and heavy partial cuts (such as seed tree or shelterwood systems), which opens up the site to maximum solar gain. This results in the greatest production of both young hardwood that is important to wildlife and the spruce understory valuable years later as timber. Even-aged management techniques are utilized to provide young, vigorously growing stands in juxtaposition to older, undisturbed stands. Such placement of harvest units can optimize natural seedling and the edge effect. The proposed sale is a heavy partial cut to remove the birch component of the stand.
- c. <u>Topography and Soils</u>: The harvest unit extends from near the ridgeline to the toe slope of an east-facing hillside above a poorly drained valley bottom. Elevation ranges from 950 feet to about 1,250 feet with an average grade of 25 percent. The sale area and the first 3/4 mile of proposed road are underlain by the silt-loam Steese-Gilmore complex 10-45% slope. This soil type is well-drained and weathered bedrock may be present within 72 inches of the surface. The valley bottom crossed by the winter road is underlain by soil type Saulich Peat 7-12% slope, which is rated as very poorly drained and has permafrost within 24 inches of the surface. The proposed sale will be designed and managed to prevent significant impairment of the land and water with respect to renewable resources (AS 41.17.060(c)(5)).
- 2. <u>Agriculture</u>. The proposed sales are not anticipated to have any impact on current or future agricultural activity in the area, and any effects of any timber sale operations for agricultural uses will be minimal.

3. Wildlife habitat and harvest. Wildlife typical of Interior Alaska are found on this site. Signs of moose were observed. There are no known raptor nests within the proposed sale area. Should an eagle nest tree be discovered in the sale area, the nest tree will be marked on the ground and a 330 foot no-harvest radius will be established to protect the tree. No critical wildlife habitat has been identified for this area (TVSF Management Plan), nor has any become apparent during ground reconnaissance.

Treatments proposed for this stand are projected to enhance habitat conditions for moose, voles, hares, and ultimately, lynx, marten and fox. In the past, Alaska Department of Fish and Game, Division of Wildlife Conservation have recommended managing for as much diversity as possible when prescribing harvest unit size, shape and position to mimic the results of wildfire or other stand replacement phases such as insect outbreaks or flood events. To accomplish these objectives snags will be retained to provide late-successional wildlife habitat for hole nesting birds, woodpeckers, small mammals, and other species requiring perching habitat. The unit will be laid out with an uneven edge, along and between timber types. This will create varied edge effect beneficial to many wildlife species.

- 4. Fish Habitat, water resources, and water quality. According to the TVSF Management Plan, 2001 Update, "The Chena River system provides critical spawning and rearing habitat for salmon and supports the most heavily used sport fishery in the Tanana Basin". The proposed sale area is above an incipient tributary drainage that connects to Jenny M Creek (1.2 miles down valley) and subsequently the Chena River system. Jenny M Creek is catalogued anadromous south of Chena Hot Springs Road. No harvest will take place within 100 feet of Jenny M Creek or the tributary drainage. The proposed crossing of the Jenny M tributary will be perpendicular to flow and only in winter; operators may only cross the stream in compliance with ADF&G's Fish Habitat determination, which may require a permit issued by ADF&G. A 60-100' buffer of timber has been retained at the toe of the slope where the timber transitions to a dwarf timber type underlain by permafrost to minimize any potential erosion disturbance. The proposed sale will be designed and managed to protect fish habitat and water quality in compliance with the Forest Resources and Practices Act and regulations (AS 41.17 and 11 AAC 95). DOF will ensure Best Management Practices are being adhered to by requiring a complete logging plan prior to the start of any harvesting, conducting on-site inspections during logging operations and a final inspection prior to terminating the timber sale.
- 5. Recreation, tourism, and scenic resources. The Two Rivers area is used for recreational activities as well as hunting. During the winter months skiing, dog mushing, snowmachining and many other activities are common. The logging road system provides an excellent infrastructure for recreationists to access trails and waterways. The proposed harvest area is not expected to be viewable from Chena Hot Springs Road.
- 6. <u>Cultural Resources</u>. DOF works with the State Historic Preservation Office (SHPO) to identify and avoid known cultural, historic or prehistoric sites in planning the

proposed access routes and harvest areas. If additional archaeological sites are identified, proposed harvest areas and road locations will be appropriately adjusted to avoid conflicts. If any historic or archaeological sites are encountered during road construction or harvest activities, DOF will immediately inform SHPO and take action to protect the findings.

7. <u>Subsurface Resources</u>. All of TVSF Unit 6 is open to mineral entry and is available for leasing. Mineral potential in this Unit has been rated moderate to high, but no active mining claims are established within the sale area. No deleterious effects on subsurface activities are anticipated.

# G. Costs and benefits

Local commercial logging operations and their customers will benefit from the influx of the raw timber into the market. In addition to generating royalties to the State's general fund, the proposed sales will create economic benefits to the Fairbanks North Star Borough and to other locations in Alaska. The Borough business community will receive direct economic benefits from providing support services for the operators through sales of fuel, food, housing, medical and miscellaneous supplies. The residents of the Borough will receive an indirect benefit through any local taxes paid by the operator and employees during the timber harvest operations.

The sales are also expected to benefit the local economy by providing jobs. It will have a positive impact on local employment by generating numerous man-hours of work associated with the harvest and transportation of wood products from this sale. Additionally, the public may benefit from access to additional personal use fuelwood areas, as home heating continues to be expensive in Interior Alaska.

Minimal negative effects are expected on fish and wildlife habitat or water quality due to the small size, winter harvest, and shape of the sale. Other users of the Two Rivers Road may experience an increase in traffic and road wear, but also derive some benefits from road maintenance and snow-clearing operations.

#### VI. PUBLIC REVIEW

The public and agencies are invited to comment on this Preliminary Best Interest Finding. Objections or comments pertaining to the proposed action must be received in writing by the DOF Fairbanks-Delta Area Office by 4:30PM AKST Friday, December 1st, 2023 in order to ensure consideration for review. Comments should be mailed to the State of Alaska, Division of Forestry & Fire Protection, 3700 Airport Way Fairbanks, AK 99709 or by email to andrew.allaby@alaska.gov. For more information you may contact the Fairbanks-Delta Resource Forester, Andrew Allaby, 907-451-2603. To be eligible to appeal the final decision, a person must have provided written comment by 4:30PM AKST Friday, December 1st, 2023.

#### VII. PUBLIC NOTICE

This PBIF was publicly noticed in compliance with AS 38.05.945. Notice will be posted on the Alaska Online Public Notice System, and both physical and electronic notices were mailed to previous timber sale bidders as well as any property owners or business interests known to the Division in the proposed sale area. Notice will also be posted on the Division of Forestry public webpage.

#### VIII. ALTERNATIVES AND DISCUSSION

# 1. To continue the sale(s) as proposed.

This alternative meets the objectives of the Five-Year Schedule of Timber Sales and DNR's constitutional mandate, and is consistent with the land classification. It also meets the silvicultural objective of improving forest vigor, provides for a value-added end product and creates additional jobs in Alaska due to the combination logging and trucking. This alternative also complies with the management objectives of the TVSF Management Plan for Unit 6.

# 2. To modify the sale(s) by making them smaller or larger.

The proposed sale unit is a logical setting for typical commercial logging equipment in Interior Alaska. The size of the sale is designed to be large enough to be economically viable considering access development and mobilization costs and distance to processing facilities. Sales of this size are appropriately balanced to maintain other resource values as well as provide economic benefits to the Tanana Valley.

# 3. Defer the sale of this timber to a later date.

Deferring harvest to a later date would fail to meet many of the objectives of the sale program. One of the main objectives is to make State-owned timber consistently available to the timber industry.

# 4. Do not offer this timber for sale.

This alternative would result in not meeting any of the objectives outlined for this management action. Utilization of the forest resource would not be achieved. There would be no significant contribution to the State and local economies. This alternative would delay the management objectives planned for the area, deny making a source of raw materials available to the local wood products industry, and would delay the harvest of mature trees, prior to the onset of disease or insect infestation. Decay and senescence of mature birch trees results in the loss of economic value.

#### IX. RECOMMENDATION AND PRELIMINARY DECISION

After due consideration of all pertinent information and alternatives, the DNR has reached the following Preliminary Decision: To offer for sale approximately 25 acres of birch fuelwood as proposed in Alternative 1 and described in this PBIF. The DOF finds that this preliminary decision satisfies the objectives stated in this document and it is in the best interest of the State to proceed with this action under its authority of AS 38.05.035(e) (Powers and Duties of the Director) & AS 38.05.110-120; 11 AAC 71 (Timber Sale Statutes and Regulations); and AS 41.17.010-.950 and 11 AAC 95 (Forest Resources and Practices Statutes and Regulations).

To be eligible to participate in any appeal or request for reconsideration to the final finding, a person must be affected by the decision, and must have submitted comment to the preliminary finding and decision during the comment period.

If you have any questions, please contact Fairbanks-Delta Area Resource Forester, Andrew Allaby, <a href="mailto:andrew.allaby@alaska.gov">andrew.allaby@alaska.gov</a>, 907-451-2603.

X. SIGNATURE

Kevin Meany

Fairbanks-Delta Area Forester

Alaska Division of Forestry & Fire Protection

# XI. ATTACHMENTS

Maps of the proposed project area follow.



